



JOB DESCRIPTION

JOB TITLE: Engineering Aide II

DEPARTMENT: Public Works Department

REPORTS TO: Senior Project Manager

DATE: April, 2009

EMPLOYEE UNIT: AFSCME

Supersedes: March, 2001

FLSA EXEMPT: No

JOB SUMMARY: Under direct supervision of the Senior Project Manager, performs paraprofessional engineering tasks related to technical support duties for Public Works projects; performs related work as required.

CLASS CHARACTERISTICS: Engineering Aide II is the journey level class of this series, fully competent to perform a variety of engineering support duties of a more complicated nature. Incumbents perform field work with a survey crew, take traffic surveys, provide drafting and computation support in the office, or may be assigned to act as a public works inspector.

The City of Morgan Hill is an AFSCME agency shop. Members of this class must either join AFSCME or pay an agency fee in lieu of membership.

ESSENTIAL DUTIES AND RESPONSIBILITIES: The following duties are performed personally, in cooperation with the Senior Project Manager, and/or in coordination with other City staff and community groups. Additional duties may be assigned.

1. Assist professional engineering staff and technical personnel in a variety of survey, drafting, research and operational activities.
2. Post information to maps or drawings and make simple sketches or layouts.
3. Answer questions from the public at a counter or on the telephone.
4. Make calculations in the field or office, using a calculator.
5. Prepare charts and/or graphs for reports or presentations.
6. Maintain records and prepare reports following an established format.
7. Perform varied general support tasks such as making copies of drawings, filing and retrieving materials.

8. Distribute maps, specifications and other documents.
9. Perform a variety of engineering-technical duties in a practical setting.
10. Prepare original drawings utilizing computer aided drafting (CAD & GIS) programs.
11. Geographic Information (GIS) system implementation and support. Install computer software, provide minor trouble-shooting solutions, and monitor the work of the City's computer support service provider in the Public Works Department and follow-up on unresolved issues with them.
12. Review and issue utility encroachment permits and oversize/overweight load permits, and maintain permit records.
13. Work on a survey party performing rod and chain tasks, recording measurements, driving stakes and clearing brush.
14. Assist with traffic engineering surveys by setting counters and taking manual counts.
15. May assist professional engineering staff and technical personnel in inspection activities.
16. Conduct soil compaction tests using a nuclear density gauge.
17. Assist the operations staff with telemetry system.

QUALIFICATION REQUIREMENTS: To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. Requirements listed below are representative of the knowledge, skill, and/or ability required.

Education & Experience:

1. Completion of high school or its equivalent and one year of college studies in mechanical drawing, drafting, computer aided design, or mathematical related fields.
2. One or more year(s) of significant related experience with a local government agency or private engineering firm performing contract work for local government agencies.
3. Two years of related experience in this class may be substituted for one year of college.

Licenses & Certificates:

1. Possession of a valid California Class C driver's license in compliance with adopted City driving standards.

Other Requirements:

1. Must possess sufficient strength to carry forty pounds of equipment and walk over rough terrain.
2. Must be willing to work out of doors in various weather conditions.

Knowledge of:

1. Basic engineering terminology, principles and practices.
2. Basic surveying terminology, principles, and practices.
3. Basic drafting terminology, principles and practices to include computer aided design (CAD).
4. Mathematics including algebra, geometry and trigonometry.
5. Basic construction terminology, principles and practices.
6. Basic inspection terminology, principles and practices.

Skill in:

1. Making accurate engineering-related calculations.
2. Keeping accurate and concise notes and records.
3. Preparing reports following an established format.
4. Use of common office software including Microsoft Office and applicable specialized engineering software.
5. Providing outstanding customer satisfaction (internally and externally).

Ability to:

1. Post information to and prepare maps and drawings.
2. Understand and follow oral and written directions.
3. Establish and maintain effective working relationships with those contacted in the course of the work.
4. Quickly learn the policies and procedures pertaining to the work.

PHYSICAL DEMANDS: Physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

1. While performing the duties of this job, the employee is regularly required to talk or hear. Employee frequently is required to sit, stand, walk, use hands and fingers to handle or feel objects, tools, or controls; reach with hands and arms; climb or balance; stoop, kneel, or crouch.
2. Employee must occasionally lift and/or move up to 40 pounds of equipment over rough outdoor terrain. Specific vision abilities required by this job include close vision, distance vision, peripheral vision, and depth perception, the ability to adjust focus.

WORK ENVIRONMENT: Work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

1. Employees generally work 80% indoors and 20% outdoors.
2. The work environment indoors is usually in a temperature-controlled office; some travel is required.
3. While performing the duties of this job outdoors, the employee occasionally works in varying weather conditions, visiting developed and undeveloped sites in various stages of construction.
4. Noise level in the work environment is usually moderate but the employee may occasionally be exposed to high level noises including but not limited to outdoor construction equipment.